

DC-5

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DC-5

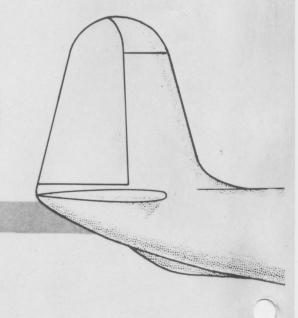
Veluxe utility for the airlines

Completely modern, yet not radical and attaining a new degree of standardization, the Douglas DC-5 is a 16-passenger high wing monoplane specifically designed for profitable short range airline operations. Incorporating advanced safety factors and built to get in and out of small airports easily, the DC-5 fills a definite need and opens up new opportunities in air transportation.

The DC-5 was designed to meet present airline needs and future operating conditions. It's tricycle landing gear, with a nose wheel retractable into the fuselage and the two main wheels, also retractable, located aft of the center of gravity, make it ideal for "blind"landings. This gear eliminates the possibility of nosing over or ground looping. The brakes may be fully applied on contact with the ground. It makes cross-wind landings and take-offs practical and gives new mastery of control, even on the smallest fields. Because the airplane remains level in take-off or in landing, this gear adds immeasurably to the comfort of passengers and improved visibility for the pilot.

Other factors for safety and practical short haul operations include a wing loading almost 30% less than other recent designs, and an excellent power loading. Thus the airplane has unusual stability at low flying speeds. No other design has been projected with great-

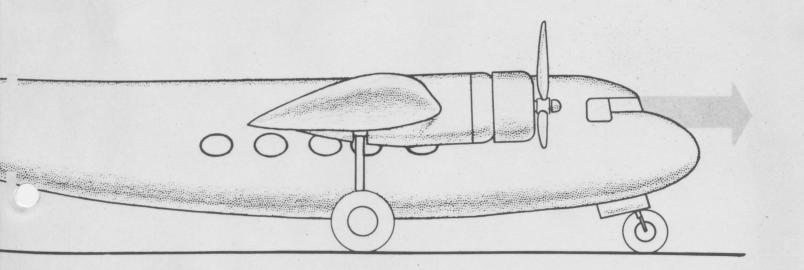
er consideration for the airfoil section with particular attention given to the important section at the wing tip.



The DC-5 has the same "simple" flap as used on the DC-4. This flap is of importance since it allows excellent tail surface control when lowered. In addition to these design features of stability and control, best known practices are employed in regard to wing taper ratio and similar technical design considerations.

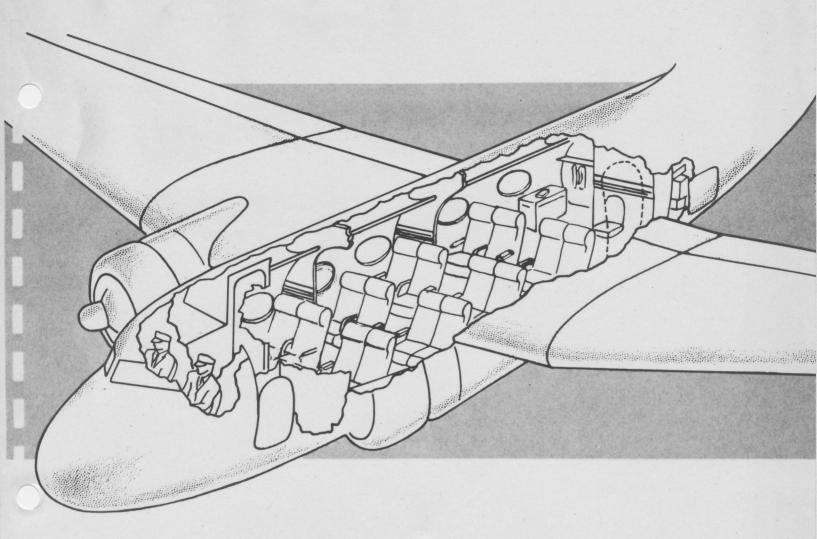
The airplane incorporates numerous time tested and proven features of the DC-2 and DC-3. Many parts including engine mounts, collector rings, control columns, rudder pedals and pilot's seats etc. are interchangeable with previous models. This standardization insures perfection of these parts through service development, effects substantial production economies and saves the operator a considerable investment in spare parts.

Simple, rugged design, ease and economy of maintenance and excellent aerodynamic characteristics assure economical operation and make possible greater returns on the investment.



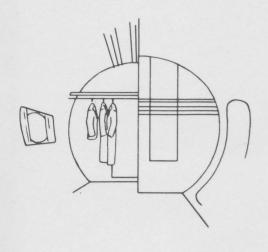
Of necessity maintenance must be a major consideration, especially to the short haul operator serving a low revenue territory. Typical of this consideration in the DC-5 is the high wing which allows an overhead control system with control cables going directly from the control station to the spar, then out to engines. This eliminates control pedestals and a series of pullerys and fairleads necessary with low wing design. Simple cover plates on top of the fuselage and in the ceiling provide easy access. This makes possible the permanent installation of the floor and should increase life of control cables space they are not exposed to grit as in the case of cables running under the floor. Other provisions for simplified maintenance are noted elsewhere.

With a convenient and comfortable seating arrangement for 16 passengers, a crew of three and cargo compartments totaling 272 cubic feet, the DC-5 possesses loading characteristics heretofore unapproached. As the fuselage arrangement provides centering passenger and cargo loads near the center of gravity loading presents no technical problem therefore speeds up the operation which will be reflected in improved elapsed schedules.



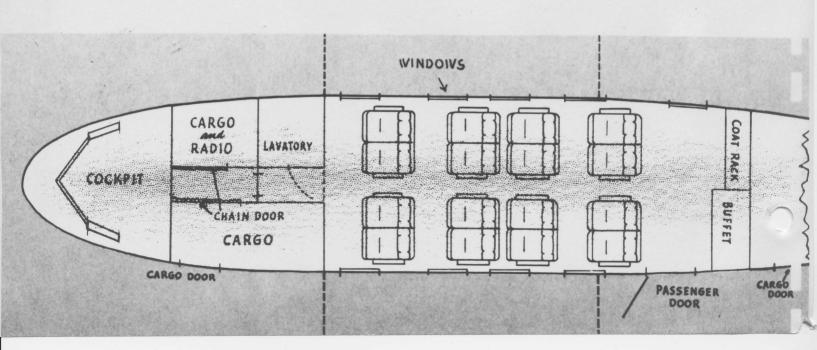
We believe that here is an airplane of extraordinary passenger appeal. It is of good proportion, looks fast, sleek and sturdy. The circular fuselage with its oval windows makes an attractive design and the plane's proximity to the ground, with the wing above, appeals to the average person who views its appearance as natural.

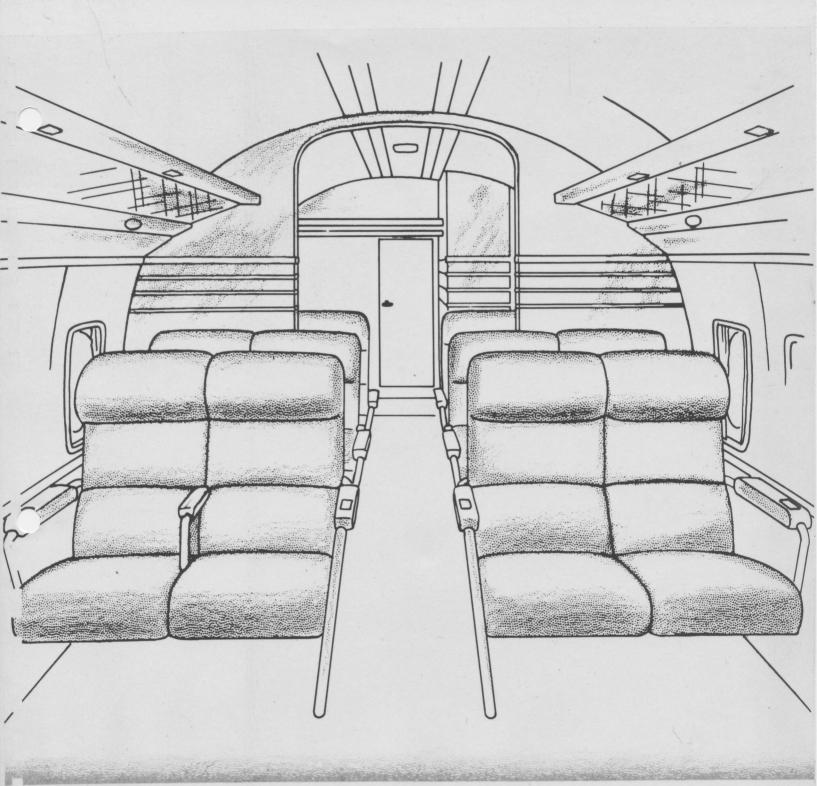
To the passenger, seated in a scientifically designed, deeply upholstered chair, the DC-5 affords the unsurpassed visibility true only of high wing planes. Due to the scientific sound-proofing of the cabin with latest developed materials, the passenger's enjoyment is enhanced by lack of extraneous noises.



At the passenger's finger tips are ash trays, fresh air vents, reading lights. No stray drafts annoy him, yet the air is always fresh and at the proper temperature. He feels relaxed, comfortable and secure.

Aft of the pilot's compartment are the forward cargo and baggage holds of 1450 lbs. capacity, located on each side of the passageway to the main cabin. A lavatory, similar to that of the DC-3 is located at the right side of this aisle aft of the right cargo hold. From this point extends the main cabin with two rows in pairs of 16 richly upholstered chairs separated by a center aisle. Exceptionally large oval windows are especially designed to provide wide, unobstructed vision from either side of the cabin. Aft of the entry door, on the left side of the cabin is

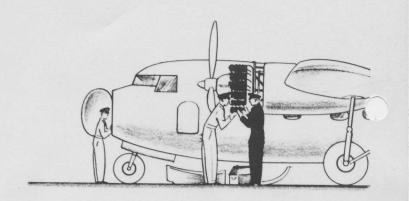




the buffet and the stewardess' folding chair. A coat rack is located on the right side opposite the buffet with a large access door to the rear cargo and baggage hold of 850 lbs. capacity. As propellers are located much farther from the fuselage than has been standard practice, a marked reduction in sound and vibration levels should be noted.

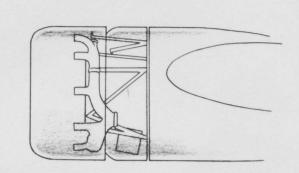
Maintenance

MAINTENANCE ease is exemplified by such items as level position of engines due to tricycle gear and quick access to fuel system strainer from the ground without need for use of a service stand.



Parts

PARTS such as engine mounts, control columns, rudder pedals, collector rings, pilot's seats, etc. are DC-2 and DC-3 "service perfected parts. Added advantage is a reduced investment in spares.



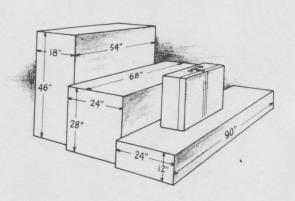
Cargo

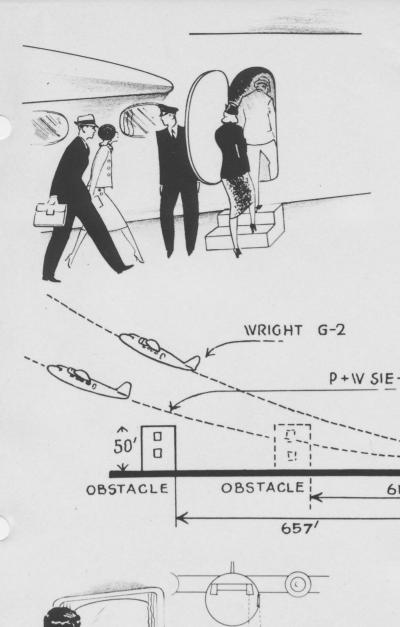
CARGO capacity is abundant fore and aft. Holds of extra large dimensions stow consignments of various sizes and shapes. Large doors close to ground simplify and speed up loading operation.



Vimensions

AT RIGHT are illustrated dimensions of largest size pieces that can be accommodated in cargo holds. Among them is represented outside dimensions of plane's spare tire.





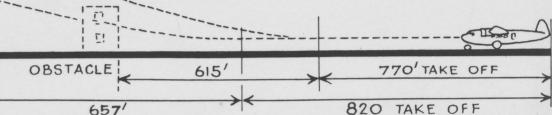


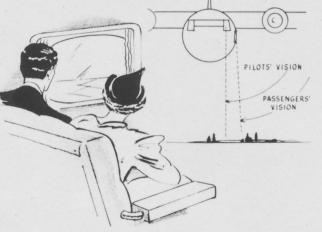
PASSENGER entry door proximity to the ground facilitates passenger loading. This feature should reflect favorably in scheduled elapsed time from one end of the route to the other.





50 ft.





Vision

GREATER VISION is a DC-5 achievement that is a real contribution to safety, pilot's peace of mind and passenger enjoyment. Important factors are tricycle gear, high wing, windshield angle and placement of cabin windows.

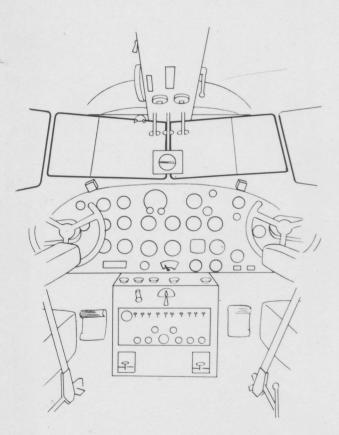
Landing

TRICYCLE GEAR as proven with the DC-4 permits abrupt descent at almost any desired angle and provides positive contact with the ground for quick action of brakes to shorten the landing role.

Pilots Compartment

Here, indeed is a "pilot's" airplane with new ease of control, comfort and wide, unobstructed vision. Although the pilot's compartment follows the DC-3 in general arrangement, numerous innovations are incorporated. Engine controls are slightly overhead but practically at eye level. This position is particularly advantageous when landing. Flight instruments including Sperry artificial horizon and directional gyro (standard equipment) are conveniently arranged in the center panel.

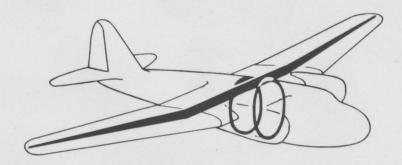
Standard DC-3 pilot's seats are used. These may be adjusted to any desired position. The DC-3 rudder pedals are adjustable and incorporate toe braking. The



of the pilot while the landing gear control is at the copilot's left. Exceptionally
deep side windows allow wide
vision downward. The windshield is at proper angle to
eliminate glare and is in two
sections with provision for
opening in bad weather without rain or snow striking the
pilot's face or getting in the
pilot's compartment.

Wing

An all metal, full cantilever mono spar wing with fabric covered control surfaces has been selected for its efficiency, simplicity and inherent strength. The entire wing is a torque-stiff structure and incorporates many improvements resulting from 18 years experience in aircraft design and construction. Wing span is 78 feet; wing area is 825 square feet. Wing loading is only 22.1 per square foot which is almost 30% less than other recent designs.



Empennage

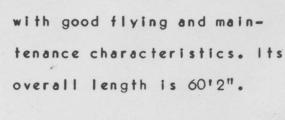
The empennage consists of a single rudder and elevator with vertical and horizontal fins of proven design. They are unusually large, providing exceptional control at low speeds. Both empennage and control surfaces are of the mono spar type. The fixed surfaces are metal covered while movable surfaces are

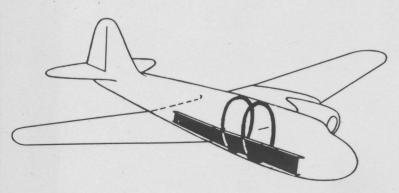
fabric covered. Surface controls are carefully balanced both statically and dynamically, the section forward of the hinge balancing that directly to the rear of the hinge, thus eliminating torsional flutter and eccentric hinge loads.

Fuselage

The fuselage is of the conventional semi-monocoque type with longitudinal stiffeners and stressed skin covering, similar to the DC-3. A stout fore-and-aft keel or beam is laid along the bottom center line of the ship, running from the nose wheel well to the rear of the main cabin. This beam not only adds rigidity to the fuselage structure but acts as a skid in case of landing with wheels up.

Another unique point in the fuselage is the two truss frames which encircle the cabin and tie into the wing structural members. The cross section of the fuselage is an absolute circle thus providing a very efficient aerodynamic shape and maximum strength per structural pound. From stem to stern it is a structure



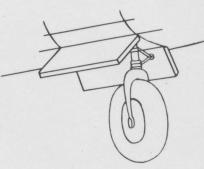


Landing Gear

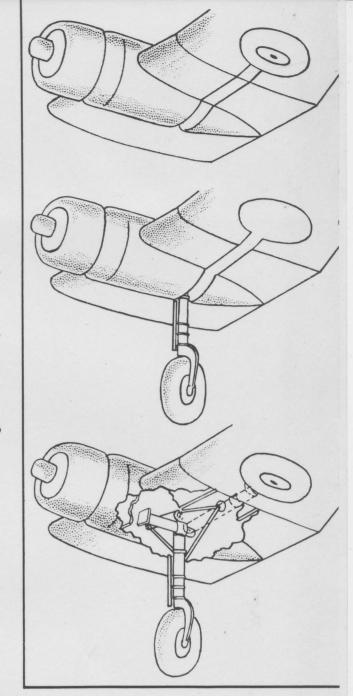
The landing gear is of the single strut type, similar to the DC-4. The main wheels retract outward and up into the wing by hydraulic control. The system reflects the perfection achieved in preceeding Douglas hydraulic systems.

The nose wheel retracts aft and up into the wheel well in the fuselage and is hydraulically operated simulation and is hydraulically operated simulation. In the insertion and is hydraulically operated simulation and is hydraulically operated simulation. In the insertion and is hydraulically operated simulation and is hydraulically operated simulation. In the insertion and is hydraulically operated simulation and is hydraulically operated simulation. In the insertion and is hydraulically operated simulation and is hydraulically operated simulation. In the insertion and is hydraulically operated simulation and is hydraulically operated simulation

sufficiently to act as a forward shock absorber in case of a belly landing. The main gear hydraulic mechanism is located within the wing, protected from dirt. Wheel tread is exceptionally wide, being 22 feet. Wheelbase



is 19 feet. Hydraulic brakes will be standard. Tire sizes: Main wheels, 15.00 x 16. Nose wheel, 23" smooth contour. Air wheels of 20 x 10 size will be optional.



Electrical System

Because of short-coupled "in-line" arrangement the electrical system again emphasizes ease of maintenance. Battery is easily installed from the ground and has a hot lead to junction box of only one foot. Radio is located above front baggage hold, over junction box.

Power Plant

Engines and nacelles are in the center wing section and allow a 15" fuselage clearance for the II'6" full feathering propellers. Engine mounts, controls and some installation parts forward of the firewall are interchangeable with the DC-3. Live rubber shocks dissipate engine vibration. Standard engines are Wright Cyclones F-62 and G2 and Pratt & Whitney Hornet SIE-2G. Engine manufacturers maintain technicians at the Douglas plant to inspect, test and certify each installation.

Fuel System

Standard fuel system stores 550 gals. In two tanks in the wing. Each engine has independent fuel supply but can draw from supply of the other as needed. Tanks are new oval design without baffles for positive drainage; their long life is proven by U.S. military service. The oil tanks of similar design are easily cleaned.

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200 MILES	M M			***************************************	- 1 -1
HORSEPOWER	850	917.5	1010	1100	1275 G-2
P & W SIE-2G }	55%	60%	65%	75%	
Wright G-2	50%	55%	60%	65%	75%
SPEED (Cruising)	169	176	183.5	192	203
PASSENGERS	16	16	16	16	16
MAIL US LBS EN LBS FOR	2547	2471	2407	2331	
EXPRESS LBS &	2291	2215	2151	2075	1916
FUEL (16s) GAS	963	1039	1103	1179	1338
CREW Pilots (2) @ 170 lbs ea. Stewardess (1) @ 130 lbs	470	470	470	470	470

BUFFET EQUIP. (16s)

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	300 MILES					
	HORSEPOWER	850	917.5	1010	1100	1275 G-2
	P & W SIE-2G} Wright F-62	55%	60%	65%	75%	
	Wright G-2	50%	55%	60%	65%	75%
	SPEED (Cruising)	169	176	183.5	192	203
	PASSENGERS	16	16	16	16	16
	MAIL US LBS BAGGAGE LBS	2277	2196	2117	2026	
	EXPRESS LBS		1940	1861	1770	1576
	FUEL (16s) GAS	1233	1314	1393	1484	1678
	CREW Pilots (2) 11 @ 170 lbs ea. Stewardess (1) 1 @ 130 lbs	470	470	470	470	470

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BUFFET EQUIP. (16s)

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HORSEPOWER	850	917.5	1010	1100	1275 G-2
P & W SIE-2G } —— Wright F-62	55%	60%	65%	75%	
Wright G-2	50%	55%	60%	65%	75%
SPEED (Cruising)	169	176	183.5	192	203
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		030				
P & W SIE-2G }	_	55%	60%	65%	75%	
Wright G-2		50%	55%	60%	65%	75%
SPEED (Cruising	7	169	176	183.5	192	203
PASSENGERS		16	16	16	16	16
MAIL US LBS BAGGAGE LBS	SIE-2G/F-62	2015	1916	1822	1716	
EXPRESS LBS		1759	1660	1566	1460	1241
FUEL (165) GAS		1495	1594	1688	1794	2013
CREW Pilots (2) @ 170 lbs ea. Stewardess (1) @ 130 lbs	1	470	470	470	470	470
BUFFET EQUIP. (11	05)	50	50	50	50	50

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Wittens				
500	MILES			

HORSEPOWER		850	917.5	1010	1100	1275 G-2
P & W SIE-2G} Wright F-62	-	55%	60%	65%	75%	
Wright G-2	-	50%	55%	60%	65%	75%
SPEED (Cruising	77	169	176	183.5	192	203
PASSENGERS		16	16	16	16	16
MAIL (US) LBS BAGGAGE LBS	SIE-2G/F-62	1752	2 1636 153		1411	
EXPRESS LBS	G-2	1496	1380	1275	1155	906
FUEL (Ibs) GAS		1758	1874	1979	2099	2348
CREW Pilots (2) 11 10 170 lbs ea. Stewardess (1) 130 lbs	1	470	470	470	470	470
BUFFET EQUIP. (16		50	50	50	50	50

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600) MILES				
HORSEPOWER	850	917.5	1010	1100	1275 G-
P & W SIE-2G}	55%	60%	65%	75%	
Wright G-2	50%	55%	60%	65%	75%
SPEED (Cruising)	169	176	183.5	192	203
PASSENGERS	16	16	16	16	15
MAIL US LBS E-20/F-20/F-20	1487	1351	1237	1101	
EXPRESS LBS &	1231	1095	981	845	736
FUEL (1bs)	2023	2159	2273	2409	2688
CREW Pilots (2) @ 170 lbs ea. Stewardess (1) @ 130 lbs	470	470	470	470	470

DC-5 RANGE AND PAYLOAD

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CHARLES THE CONTRACTOR						~_ A.	
	700 MILES						

HORSEPOWER	850	917.5	1010	1100	1275 G-2
P & W SIE-2G}	- 55%	60%	65%	75%	
Wright G-2	50%	55%	60%	65%	75%
SPEED (Cruising)	169	176	183.5	192	203
PASSENGERS	16	16	16	15	14
MAIL US LBS BAGGAGE LBS	1222 1222	1071	942	966	
EXPRESS LBS	966	815	686	710	571
FUEL (Ibs) GAS	2288	2439	2568	2714	3023
CKEW Pilots (2) @ 170 lbs ea. Stewardess (1) @ 130 lbs	470	470	470	470	470
BUFFET EQUIP. (16s	50	50	50	50	50

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HORSEPOWER		850	917.5	1010	1100	1275 G-2	
P & W SIE-2G} Wright F-62 }	_[55%	60%	65%	75%		
Wright G-2		50%	55%	60%	65%	75%	
SPEED (Cruising	1	169	176	183.5	192	203	
PASSENGERS		16	15	15	14	12	
MAIL US LBS BAGGAGE LBS	SIE-2G/F-62	957	961	817	826		
EXPRESS LBS	G-2	701	705	561	570	576	
FUEL (Ibs) GAS		2553	2719	2863	3024	3358	
CREW Pilots (2) @ 170 lbs ea. Stewardess (1) @ 130 lbs	Ì	470	470	470	470	470	
BUFFET EQUIP. (16	5)	50	50	50	50	50	

RANGE VS PAYLOAD

W.A.C. Cyclone F-62 or P. & W. Hornet SIE-2G

Part		1										
Number Light Light <t< td=""><td>KPW,70%</td><td>83</td><td>1057 kg</td><td>919 kg</td><td>778 kg</td><td>640 kg</td><td></td><td>438 kg</td><td></td><td>389 kg</td><td></td><td></td></t<>	KPW,70%	83	1057 kg	919 kg	778 kg	640 kg		438 kg		389 kg		
Number Light Light <t< td=""><td>12 MPH-309</td><td>Fxpr</td><td>2351 lbs</td><td>2026 lbs</td><td>1716 lbs</td><td>1411 1bs</td><td>1101 lbs</td><td></td><td></td><td></td><td></td><td>36</td></t<>	12 MPH-309	Fxpr	2351 lbs	2026 lbs	1716 lbs	1411 1bs	1101 lbs					36
D, POWER 157 MPH-253 KPM,50% 169 MPH-272 KPM,50% 169 MPH-293 KPM,60% 162 MPH-293 KPM,60% <th< td=""><td>19</td><td>Pass</td><td>16</td><td>91</td><td>16</td><td>16</td><td>16</td><td>15</td><td>14</td><td>12</td><td>11</td><td></td></th<>	19	Pass	16	91	16	16	16	15	14	12	11	
D, POWER 157 MPH-253 KPM,50% 169 MPH-272 KPM,55% 169 MPH-272 KPM,50% 160 MPH-272 KPM,50% <th< td=""><td>KPM,65%</td><td>S</td><td>1092 kg</td><td>360 kg</td><td>8£6 kg</td><td></td><td></td><td></td><td>371 kg</td><td>469 kg</td><td>335 kg</td><td></td></th<>	KPM,65%	S	1092 kg	360 kg	8£6 kg				371 kg	469 kg	335 kg	
D, POWER 157 MPH-253 KPM,50% 169 MPH-272 KPM,55% 169 MPH-272 KPM,50% 160 MPH-272 KPM,50% <th< td=""><td>2 MPH-293 I</td><td>Expre</td><td></td><td>2117 lbs</td><td>18££ 1bs</td><td>1521 lbs</td><td>1237 lbs</td><td>942 lbs</td><td>817 lbs</td><td>1034 lbs</td><td>739 lbs</td><td>88</td></th<>	2 MPH-293 I	Expre		2117 lbs	18££ 1bs	1521 lbs	1237 lbs	942 lbs	817 lbs	1034 lbs	739 lbs	88
D, POWER 157 MPH-253 KPM,50% 169 MPH-272 KPM,55% Pass Express Pass age ** Pass Express Pass Express Pass 522 kms 16 2621 lbs 1189 kg 16 2547 lbs 1155 kg 16 483 kms 16 2365 lbs 1073 kg 16 2677 lbs 158 16 644 kms 16 2113 lbs 958 kg 16 2677 lbs 16 16 965 kms 16 1863 lbs 750 kg 16 1752 lbs 795 kg 16 1126 kms 16 1609 lbs 750 kg 16 1275 lbs 554 kg 16 1126 kms 16 1101 lbs 499 kg 16 957 lbs 395 kg 16 1609 kms 16 601 lbs 273 kg 14 763 lbs 346 kg 12 1609 kms 16 601 lbs 273 kg 14 763 lbs 346 kg 12 164 kg 16 601 l	18	Pass	16	16	16	16	16	16	16	12	12	
D, POWER 157 MPH-253 KPM,50% 169 MPH-272 KPM,55% Pass Express Pass age ** Pass Express Pass Express Pass 522 kms 16 2621 lbs 1189 kg 16 2547 lbs 1155 kg 16 483 kms 16 2365 lbs 1073 kg 16 2677 lbs 158 16 644 kms 16 2113 lbs 958 kg 16 2677 lbs 16 16 965 kms 16 1863 lbs 750 kg 16 1752 lbs 795 kg 16 1126 kms 16 1609 lbs 750 kg 16 1275 lbs 554 kg 16 1126 kms 16 1101 lbs 499 kg 16 957 lbs 395 kg 16 1609 kms 16 601 lbs 273 kg 14 763 lbs 346 kg 12 1609 kms 16 601 lbs 273 kg 14 763 lbs 346 kg 12 164 kg 16 601 l	KPM,60%	67	1121 kg	996 kg	869 kg	742 kg	615 kg	486 kg	436 kg	390 kg		
D, POWER 157 MPH-253 KPM,50% 169 MPH-272 KPM,55% Pass Express Pass age ** Pass Express Pass Express Pass 522 kms 16 2621 lbs 1189 kg 16 2547 lbs 1155 kg 16 483 kms 16 2365 lbs 1073 kg 16 2677 lbs 158 16 644 kms 16 2113 lbs 958 kg 16 2677 lbs 16 16 965 kms 16 1863 lbs 750 kg 16 1752 lbs 795 kg 16 1126 kms 16 1609 lbs 750 kg 16 1275 lbs 554 kg 16 1126 kms 16 1101 lbs 499 kg 16 957 lbs 395 kg 16 1609 kms 16 601 lbs 273 kg 14 763 lbs 346 kg 12 1609 kms 16 601 lbs 273 kg 14 763 lbs 346 kg 12 164 kg 16 601 l	175 MPH-283	Expre	2471 lbs	811 9613	1916 lbs	1636 lbs	1351 lbs	1071 lbs	961 lbs	859 lbe	913 lbs	74
D, POWER 157 MPH-£53 KPM,50% 169 age * Express Pass Fass 522 kms 16 2621 lbs 1189 kg 16 255 lbs 25 483 kms 16 2365 lbs 1073 kg 16 25 644 kms 16 2113 lbs 958 kg 16 20 804 kms 16 1863 lbs 958 kg 16 177 965 kms 16 1609 lbs 750 kg 16 171 1126 kms 16 1101 lbs 499 kg 16 12 1287 kms 16 1101 lbs 499 kg 16 91 1609 kms 16 601 lbs 273 kg 15 86 1609 kms 16 601 lbs 273 kg 17 76		Pass	16	16	16	16	16	16	15	14	12	
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D, POWER 157 MPH-253 KPM,50% age * Express Pass 522 kms 16 2621 lbs 1189 kg 16 483 kms 16 213 lbs 958 kg 16 644 kms 16 2113 lbs 958 kg 16 965 kms 16 1863 lbs 750 kg 16 1126 kms 16 1609 lbs 750 kg 16 1287 kms 16 1101 lbs 499 kg 16 1609 kms 16 601 lbs 273 kg 15 1609 kms 16 601 lbs 273 kg 14		Expr	2547 lbs	2277 lbs	£015 lbs	1752 lbs	1487 lbs	125.2 lbs	957 lbs	867 lbs	763 lbs	ဖွ
D, POWER age * 522 kms 16 483 kms 16 644 kms 16 965 kms 16 1126 kms 16 11287 kms 16 1287 kms 16 12897 kms 16 1448 kms 16 1603 kms 16 1448 kms 16 1448 kms 16 1448 kms 16 1448 kms 16		Pass	16	16	16	16	16	16	16	15	14	
D, POWER age * 522 kms 16 483 kms 16 644 kms 16 965 kms 16 1126 kms 16 11287 kms 16 1287 kms 16 12897 kms 16 1448 kms 16 1603 kms 16 1448 kms 16 1448 kms 16 1448 kms 16 1448 kms 16	KPM, 50%	888	1189 kg	1073 kg	958 kg	845 kg	730 kg	615 kg	439 kg	384 kg	£73 kg	
D, POWER age * 522 kms 16 483 kms 16 644 kms 16 965 kms 16 1126 kms 16 11287 kms 16 1287 kms 16 12897 kms 16 1448 kms 16 1603 kms 16 1448 kms 16 1448 kms 16 1448 kms 16 1448 kms 16	157 MPH-253	Expr	2621 lbs	2365 lbs	2113 lbs	1863 lbs	1609 lbs	1355 lbs	1101 lbs	847 lbs	601 lbs	62
D, POW 3252 483 644 804 965 1128 1603 1603 HR		Pass	16	16	16	16	16	16	16	16	16	
	POWER	*	322 kms	483 kms	644 kms	804 kms	96 5 kms	1126 kms	1287. kms	1448 kms	1609 kms	AL
	SPEED,	Rang	200 mi	300 m1	400 mi	500 mi	600 mi	700 mi	800 m1		2 8 8 8	FUEL G

Wright Aero Corp. Cyclone G2

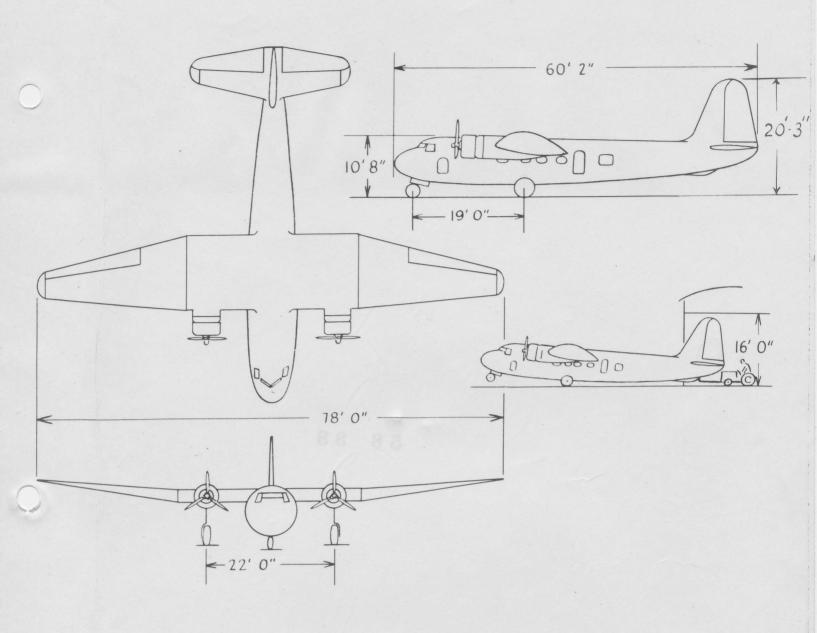
S	SPEED, POWER		169 MPH-272 KPM,50%	2 KPM, 50%		177 MPH-285	MPH-285 KPM, 55%		185 MPH-198 KPH, 60%	KPII, 60%	15	192 MPH-309 KPM,65%	KPM, 65%	3	103 MPH-317 KPM,75%	KPM,75%
	Range *	Pass	Express		Pass	Express	38	Pass	Express	02 04	Pass	Express	80	Pass	Fxpress	vo vo d
£00 mi	mi 322 kms	3 16	2291 lbs	1039 kg	16	2215 lbs	1005 kg	16	2151 lbs	975 kg	16	2075 lbs	941 kg	16	1916 168	869 kg
300 mi	mi 483 kms	16	2021 lbs	917 kg	16	1940 lbs	880 kg	16	1861 lbs	844 kg	16	1770 lbs	803 kg	16	1576 lbs	715 kg
400 mi	mi 644 kms	16	1759 lbs	798 kg	16	1660 lbs	753 kg	16	1566 lbs	710 kg	16	1460 lbs	662 kg	16	1241 lbs	563 kg .
500 mi	mi 804 kms	16	1496 lbs	678 kg	16	1380 lbs	626 kg	16	1275 lbs	578 kg	16	1155 lbs	524 kg	16	906 lbs	411 kg
600 mi	mi 965 kms	16	1231 lbs	558 kg	16	1095 lbs	497 kg	16	981 lbs	445 kg	16	845 lbs	383 kg	15	736 lbs	334 kg
700 mi	mi 1126 kms	2 16	966 lbs	458 kg	1 <u>6</u>	815 lbs	370 kg	16	686 lbs	311 kg	15	710 lbs	352 kg	14	571 lbs	259 kg
800 mi	mi 1287 kms	s 16	701 lbs	318 kg	15	705 lbs	320 kg	15	561 lbs	254 kg	14	570 lbs	258 kg	12	576 lbs	261 kg
300 mi	mi 1448 kms	15	611 lbs	277 kg	14	603 lbs	273 kg	12	778 lbs	253 kg	12	601 1bs	273 kg	10	6;4 lbs	283 kg
1000 mi	mi 1609 kms	3 74	507 lbs	£30 kg	12	657 lbs	297 kg	12	483 lbs	219 kg	п	465 lbs	211 kg	0	397 1bs	180 kg
F	FUEL GAL		02			77			84			92			107	
											1					

ASSUMPTIONS:

Pessengers @ 170 lbs. each. Personal baggage at 25 lbs. each included in express. Fuel weight @ 6.4 per gal. Range Cruising speed plus 7 min. for take-off, 6 min. for climb, .75 hr. fuel reserve. Cruising speeds shown are for the full gross weight of 18,250 lbs. All performances are calculated for still air.

Engine	Cyclone FeE	Cyclone F62	Hornet SIE2G	Hornet SIEEG	Cyclone G2	Cyclone G?
Rated power per engine	760 hp	770.6 cv	750 hp	760.5 cv	850 hp	862 cv
at critical altitude of	5800 ft	1768 m	7000 ft	2134 m	5800 ft	1768 m
Sea level Take-off power	Фф 006	912.6 cv	875 hp	887.2 cv	1000 hp	1014 cv
Emergency power	810 hp	821.3 cv	800 hp	811.5 cv	None	None
Power loading rated	12 #/hp	5.36 kg/cv	12.17 #/hp	5.44 kg/cv	10.9 #/hp	4.87 kg/cv
Take-off	10.15 #/hp	4.54 kg/cv	10.42 #/hp	4.66 kg/cv	9.2 #/hp	4.11 kg/cv
Emergency	11.55 #/hp	5.03 kg/cv	11.40 #/hp	5.10 kg/cv	10.9 #/hp	4.87 kg/cv
Wing loading	22.1 #/ft2	107.90 kg/m ²	22.1 #/ft ²	107.90 kg/m²	22.1 #/ft ²	107.90 kg/m²
Speed - maximum	215 mph	346 kph	217 mph	349 kph	224 mph	360 kph
at eltitude of	6800 ft	£072 m	8000 ft	2438 m	6800 ft	£072 m
Cruising, 10,000 ft (3048 m) @ 65% power	182 mph	293 kph	182 mph	293 kph	192 mph	309 kph
60% power	176 mph	283 kph	176 mph	283 kph	185 mph	498 kph
50% power	157 mph	253 kph	157 mph	253 kph	169 mph	272 kph
Landing	64 mph	103 kph	64 mph	103 kph	64 mph	103 kph
Ceiling - Normal Service	21,700 ft	6614 m	££,600 ft	6888 ш	£3,400 ft	7152 m
Absolute, single engine	10,550 ft	3215 m	10,620 ft	3240 m	11,000 ft	3353 m
Service, single engine	* 9,250 ft	ж 2819 ж	* 9,370 ft	* 2856 ш	* 9,650 ft	* 2941 m
Maximum rate of climb - critical altitude	1,050 ft/min	350 m/m	1,000 ft/min	305 m/m	1,225 ft/min	373 m/m
See level, climb	1,280 ft/min	450 m/m	1,320 ft/min	402 m/m	1,580 ft/min	481 m/m
Sea level, 1 engine climb	£15 ft/min	65 m/m	210 ft/min	64 m/m	225 ft/min	С8 m/m
Take-off run, no flaps - sea level	800 ft	244 m	840 ft	256 ш	770 ft	£35 m
5000 ft (1524 m)	895 ft	273 m	950 ft	£89 m	890 ft	271 m
Take-off over 50 ft (15 m) obstacle	1440 ft	439 m	1510 ft	, ш 094	1385 ft	422 B
Weight empty	11,500 lbs	5216 kg	11,500 lbs	5216 kg	11,756 lbs	5332 kg
Total Useful Load	6,750 lbs	3062 kg	6,750 lbs	3062 kg	6,494 1bs	2945 kg
Total Gross Weight	18,250 lbs	8278 kg	18,250 lbs	8278 kg	18,850 lbs	8£78 kg
* Single engine service ceiling increases at constant mate of	netent neto of					

^{*} Single engine service ceiling increases at constant rate of 500 ft. for reduction of each 350 lbs. in gross weight.



CLEARANCE of 4" from fin tip to 16' hangar door beam is allowed by raising nose wheel 28". This clears propellers. Operation is simple with tractor and a winch.



DOUGLAS AIRCRAFT COMPANY, INC.
SANTA MONICA, CALIFORNIA